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CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450, on the below date:

Date: August 10, 2004 Name: Amir N. Penn (40,767) Signature: Amir N. Penn

BRINKS HOFER GILSON &LIONE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of:	Allan O. DEVANTIER, et al.
Appln. No.:	10/684,043
Filed:	October 10, 2003
For:	SYSTEM FOR SELECTING FOR SPEAKER LOCATIONS IN AN AUDIO SYSTEM
Attorney Docket No:	11336-435

Examiner: TBA

Art Unit: 2644

Mail Stop Amendment
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

TRANSMITTAL

Attached is/are:

☒ Transmittal Letter; Information Disclosure Statement (4 –pages - in duplicate); PTO-1449 (3 pages); Required Copies of Cited References

☒ Return Receipt Postcard

Fee calculation:

☐ No additional fee is required.

☐ Small Entity.

☐ An extension fee in an amount of $_____ for a _____-month extension of time under 37 C.F.R. § 1.136(a).

☐ A petition or processing fee in an amount of $_____ under 37 C.F.R. § 1.17(_____).

☐ An additional filing fee has been calculated as shown below:

					Small Entity			Not a Small Entity	
	Claims Remaining After Amendment		Highest No. Previously Paid For	Present Extra	Rate	Add'l Fee	or	Rate	Add'l Fee
Total		Minus			x $9=			x $18=	
Indep.		Minus			x 43=			x $86=	
First Presentation of Multiple Dep. Claim					+$145=			+ $290=	
					Total	$		Total	$

Fee payment:

☐ A check in the amount of $_____ to cover the above-identified fee(s) is enclosed.

☐ Please charge Deposit Account No. 23-1925 in the amount of $_____. A copy of this Transmittal is enclosed for this purpose.

☐ Payment by credit card in the amount of $_____ (Form PTO-2038 is attached).

☒ The Director is hereby authorized to charge payment of any additional filing fees required under 37 CFR § 1.16 and any patent application processing fees under 37 CFR § 1.17 associated with this paper (including any extension fee required to ensure that this paper is timely filed), or to credit any overpayment, to Deposit Account No. 23-1925.

Respectfully submitted,

8/10/04
Date

Amir N. Penn
Amir N. Penn (Reg. No. 40,767)

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CERTIFICATE OF MAILING

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August 10, 2004
Date of Deposit

Amir N. Penn (40,767)
Name of Applicant, Assignee or Registered Representative

Signature

8/10/04
Date of Signature

Our Case No.: 11336-435

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Allan O. DEVANTIER, et al.

Serial No.: 10/684,043

Filing Date: October 10, 2003

For: SYSTEM FOR SELECTING SPEAKER LOCATIONS IN AN AUDIO SYSTEM

Examiner: TBA

Group Art Unit No.: 2644

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
Alexandria, VA 22313-1450

Dear Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed below and on the attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

The references now cited are the following:

US PATENT DOCUMENTS

	DOCUMENT NUMBER Number-Kind Code (if known)	DATE	NAME	CLASS/ SUBCLASS	FILING DATE
A1	4,638,505	01/20/1987	Polk, et al.		
A2	5,581,626	12/03/1996	Palmer		
A3	6,031,920	02/29/2000	Wiener		

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER Number-Kind Code (if known)	DATE	COUNTRY	CLASS/ SUBCLASS	TRANSLATION YES OR NO
A4	EP 1 088 298 B1	11/12/2003	EPO		YES

OTHER ART REFERENCES

A5	ALLISON, Roy F., "The Influence of Room Boundaries on Loudspeaker Power Output", Journal of the Audio Engineering Society, June 1974, Vol. 22, No. 5, pp. 314-320.
A6	ALLISON, Roy F., "The Sound Field in Home Listening Rooms.II" Audio Engineering Society, 52nd Convention Oct. 31 – Nov. 3, 1975, AES preprint 1081 (L-2), 15 pages.
A7	ASANO, Futoshi; SWANSON, David C., "Sound Equalization in Enclosures using Modal Reconstruction", J. Acoust. Soc. Am, Oct. 1995, 98 (4), pp. 2062-2069.
A8	ASANO, Futoshi; SUZUKI, Yoiti; and SWANSON, David C., "A Method of Optimizing Source Configuration in Active Control Systems Using Gram-Schmidt Orthogonalization," Electrotechnical Laboratory, 1-1-4 Umezono Tsukuba 305 Japan, asano@etl.go.jp, R.I.E.C. Tohoku Univ., A.R.L. Pennsylvania State University, 4 pages.
A9	BALLAGH, K.O., "Optimum Loudspeaker Placement near Reflecting Planes", J. Audio. Eng. Soc., Dec. 1983, Vol. 31, No. 12, pp. 931-935.
A10	BENJAMIN, Eric and GANNON, Benjamin, "Effect of Room Acoustics on Subwoofer Performance and Level Setting," Journal of the Audio Engineering Society, 109th Convention, Sept. 22-25, 2000, Los Angeles, California, AES preprint 5232, 36 pages.
A11	BERKOVITZ, Robert, "Digital Equalization of Audio Signals," Digital Audio, pp. 226-238.
A12	BHARTIKAR, Sunil; KYRIAKAKIS, Chris, "New Factors in Room Equalization Using a Fuzzy Logic Approach," Journal of the Audio Engineering Society, Audio Engineering Society Convention Paper 5450, 111th Convention, Sept. 21-24, 2001, New York, New York, pp. 1-10.
A13	BORWICK, John (ed.), Loudspeaker and Headphone Handbook, Butterworth & Co. (Publishers) Ltd., 1988, ch. 7, pp. 264-318 (total 57 pages).
A14	CARA (Computer Aided Room Acoustics), ELAC Technische Software GmbH, Rendsburger Landstrasse 215, D-24113 Kiel, Germany, http://www.cara.de/ENU/index.html, 1 page.
A15	D'ANTONIO, Peter D., COX, Trevor J., "ROOM OPTIMIZER: A Computer Program to Optimize the Placement of Listener, Loudspeakers, Acoustical Surface Treatment and Room Dimensions in Critical Listening Rooms," RPG Diffuser Systems, Inc., pp. 45-61.
A16	ELLIOTT, S.J., NELSON, P.A., "Multiple-Point Equalization in a Room Using Adaptive Digital Filters", Journal of the Audio Engineering Society, Nov. 1989, Vol. 37, No. 11, pp. 899-907.
A17	ELLIOTT, S.J.; BHATIA, L.P.; DEGHAN, F.S.; FU, A.H.; STEWART, M.S.; WILSON, D.W.;, "Practical Implementation of Low-Frequency Equalization Using Adaptive Digital Filters," Journal of the Audio Engineering Society, December 1994, Vol. 42, No. 12, pp. 988-998.
A18	FLIKKEMA, Paul G., "An Algebraic Theory of 3D Sound Synthesis with Loudspeakers," AES 22nd International Conference on Virtual, Synthetic and Entertainment Audio, pp. 1-4.

A19	GRIESINGER, David, "Multichannel Sound Systems and Their Interaction with the Room," AES 15th International Conference, pp. 159-173.
A20	GROH, A.R., "High Fidelity Sound System Equalization by Analysis of Standing Waves", Journal of the Audio Engineering Society, December, 1974, Vol. 22, No. 10, pp. 795-799.
A21	HORBACH, Dr.-Ing. Ulrich; CORTEEL, Etienne, "Array Loudspeaker System for Virtual Sound Synthesis," Patent Application, 10 pages.
A22	HORBACH, Ulrich, KARAMUSTAFAOGLU, Attila, "Numerical Simulation of Wave Fields Created by Loudspeaker Arrays," Journal of the Audio Engineering Society, AES preprint 5021 (H-2), 107th Convention, Sept. 24-27, 1999, New York, 17 pages.
A23	HORST, R.; Thoai, N.; PARDALOS, Panos M., THOAI Nguyen V., "Introduction to Global Optimization", 2nd Edition, 2000, Kluwer Academic Publishers.
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A26	KLEINER, Mendel; LAHTI, Hans, "Computer Prediction of Low Frequency SPL Variations in Rooms as a function of Loudspeaker Placement," Journal of the Audio Engineering Society, AES preprint 3577 (G2-7), 94th Convention, March 16-19, 1993, Berlin, 16 pages.
A27	KORST-FAGUNDES, Bruno, "Acoustical Equalization at Multiple Listening Positions", Selected Portions, UMI Dissertation Services, Degree Date: 1996, 26 pages.
A28	MORSE, P.M., Vibration and Sound, 2nd. Edition, McGraw Hill, NY, 1948, 25 pages.
A29	MORSE, P.M., and INGARD, K.U., Theoretical Acoustics, 1968, p. 576-599.
A30	MOURJOPOULOS, John H., "Digital Equalisation of Room Acoustics," Journal of the Audio Engineering Society, 92nd Convention, AES Preprint 3288, March 24-27, Vienna, 1992, 32 pages.
A31	MUNSHI, Anees Saeed, "Multi-Loudspeaker Multi-Point Room Equalization," Thesis (M.A.Sc.), University of Toronto, 1990, ISBN 0-315-56734-1, 103 pages.
A32	NEELY, Stephen T., Allen Jont B., "Invertibility of a room impulse response," J. Acoust. Soc. Am 66 (1), July 1979, 5 pages.
A33	OLIVE, Sean E.; SCHUCK, Peter L.; SALLY, Sharon L.; BONNEVILLE, Mark E.; "The Effects of Loudspeaker Placement on Listener's Preference Ratings," J. Audio Eng. Soc., September 1994, Vol. 42, No. 9, pp. 651-669.
A34	OPPENHEIM, Alan V., SCHAFER, Ronald W., STOCKHAM, Thomas G., Jr., "Nonlinear Filtering of Multiplied and Convolved Signals", IEEE Transactions on Audio and Electroacoustics, Sept. 1968, Vol. AU-16, No. 3, pp. 437-466.
A35	OPPENHEIM, Alan V.; SCHAFER, Ronald W.; BUCK, John R., Discrete Signal Processing, 2nd Edition, 1999, Prentice Hall, 4 pages.
A36	PEDERSEN, Jan A.; HERMANSEN, Kjeld; and RUBAK, Per, "The Distribution of the Low Frequency Sound Field and its Relation to Room Equalization", Journal of the Audio Engineering Society, 96th Convention, AES preprint 3852 (P12.5), February 26-March 1, 1994, Amsterdam, 33 pages.
A37	SANTILLIN, Arturo Orozco, "Experimental Low-Frequency Sound Equalization in an Extended Region of An Enclosure Using Adaptive Filters," Journal of the Audio Engineering Society, AES preprint 4755 (P8-4), 104th Convention, May 16-19, 1998, Amsterdam, 9 pages.
A38	WALKER, R., "Low-Frequency Room Responses: Part 2 – Calculation Methods and Experimental Results," BBC Research Dept. Report BBD RD 1992/9, 1992, 21 pages.
A39	WATERHOUSE, Richard V. "Output of a Sound Source in a Reverberation Chamber and Other Reflecting Environments," The Journal of the Acoustical Society of America, Vol. 30, No. 1, pp. 4-13.
A40	WELTI, Todd, "How Many Subwoofers are Enough" Journal of the Audio Engineering Society, Audio Engineering Society Convention Paper, 112th Convention May 10-13, 2002, Munich Germany, pp. 1-15.

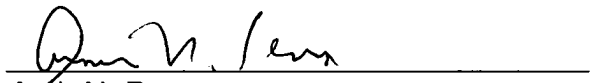
A41	WELTI, Todd, "Subwoofers: Optimum Number and Locations," 30 pages.
A42	ZACHAROV, Nick; BECH, Soren; MEARES, David, "The Use of Subwoofers in the Context of Surround Sound Program Reproduction," J. Audio Eng. Soc., April 1998, Vol. 46, No. 4, pp. 276-287.

In accordance with 37 C.F.R. § 1.97(g),(h), this Information Disclosure Statement is not to be construed as a representation that a search has been made and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

This Information Disclosure Statement is being filed prior to the receipt of the first Official Action reflecting an examination on the merits and hence is believed to be timely filed in accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the Commissioner is hereby authorized to deduct said fees from Brinks Hofer Gilson & Lione Deposit Account No. 23-1925. A duplicate copy of this document is enclosed.

Applicant(s) respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,



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